



03-22-06

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PATENT  
717664.10

CERTIFICATE OF EXPRESS MAILING

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I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, Attn: Certificate Of Correction Branch, P.O. Box 1450, Alexandria, VA 22313, on March 21, 2006.

Toni Fragale  
Toni Fragale

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE: U.S. ISSUED PATENT

Attorney Docket No. 717664.10

**Certificate**

APPLICANT: Bishop, William M.

**MAR 24 2006**

U.S. PATENT NUMBER: 6,848,502

**of Correction**

DATE OF PATENT: February 1, 2005

ISSUING FROM U.S. PATENT APPLICATION NO.: 10/604,947

FOR: METHOD AND APPARATUS FOR WARMING AND STORAGE OF COLD FLUIDS

REQUEST FOR ISSUANCE OF A CERTIFICATE OF CORRECTION

Commissioner for Patents  
Attn: Certificate of Correction Branch.  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed herewith is a Certificate of Correction, in duplicate, in connection with U.S. Patent No. 6,848,502. The errors indicated on the enclosed form are printing errors and it is requested that a Certificate of Correction be issued. The errors made by applicant that are indicated on the enclosed form are typographical in nature and do not change the scope of the invention or constitute new matter. The appropriate fee is included. Applicant requests that a Certificate of Correction be issued.

Date: March 21, 2006

Respectfully submitted,

Lawrence E. Evans

Reg. No. 29,531

Blackwell Sanders Peper Martin LLP

720 Olive Street, 24th Floor

St. Louis, Missouri 63101

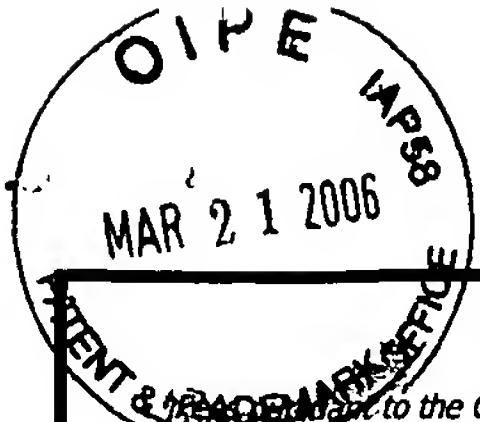
(314) 345-6000

03/23/2006 DEMMANU1 00000098 110160 6848502

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MAR 27 2006

MAR 27 2006



Effective on 12/08/2004  
Amendment to the Consolidated Appropriations Act, 2005 (H.R. 4818)

# FEE TRANSMITTAL for FY 2005

Applicant claims small entity status. See 37 CFR 1.27

**TOTAL AMOUNT OF PAYMENT** **(\$)** 100.00

## Complete if Known

Application Number	10/604,947
Filing Date	August 28, 2003
First Named Inventor	Bishop, William M.
Examiner Name	LEUNG RICHARD L
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27	Art Unit 3744
<b>TOTAL AMOUNT OF PAYMENT</b> <b>(\$)</b> 100.00	Attorney Docket No. 717664.10

Check  Credit card  Money Order  None  Other (please specify): \_\_\_\_\_

Deposit Account Deposit Account Number 11-0160 Deposit Account Name Blackwell Sanders Peper Martin, LLP

For the above-identified deposit account, the Director is authorized to: (check all that apply)

Charge fees indicated below  Charge fee(s) indicated below, except for the filing fee  
 Charge any additional fee(s) or  Credit any overpayments

underpayments of fee(s) under 37 CFR 1.16 and 1.17

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038

## FEE CALCULATION

### 1. BASIC FILING, SEARCH AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		
	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fees paid (\$)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

### 2. EXCESS CLAIM FEES

#### Fee Description

Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent

**Small Entity**

**Fee(\$)** 50 **Fee(\$)** 25

Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent

200 100

Multiple dependent claims

360 180

Total Claims

Extra Claims

Fee (\$)

Fee Paid (\$)

Multiple Dependent Claims

Fee (\$)

Fee Paid (\$)

- 20 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP= highest number of total claims paid for, if greater than 20

Indep. Claims

Extra Claims

Fee (\$)

Fee Paid (\$)

- 3 or HP = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP= highest number of total claims paid for, if greater than 3

### 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
-100 = _____	/ 50 = _____	(round up to a whole number)	x _____	= _____

### 4. OTHER FEE(S)

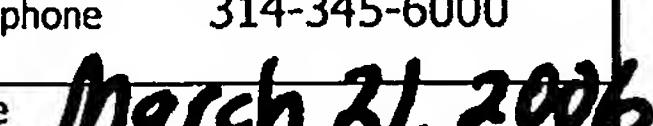
Non-English Specification, \$130 fee (no small entity discount)

Other: 1.20(a) Certificate of Correction

**Fee Paid (\$)**

\$100.00

## SUBMITTED BY

Signature		Registration No. (Attorney/Agent) 29,531	Telephone 314-345-6000
Name (Print/Type)	Lawrence E. Evans		Date 

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO : 6,848,502

DATED : February 1, 2005

INVENTOR : William M. Bishop, et al.

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Related U.S. Application Data, Item (60), delete "December 9" and replace with -- December 19

-- Col. 1, line 7, delete "December 9" and replace with -- December 19 - -;

Col. 17, following the equation, insert the paragraph - - Here  $V$  is fluid velocity,  $g$  is acceleration due to gravity,  $D$  is the pipe diameter and  $\gamma$  is the fluid density and  $\Delta\gamma$  is the change in fluid density. If  $F$  is large, the terms involving stratification in the governing equation of fluid motion dropout of the equation. As a practical example, two-phase flows in enclosed systems generally lose all stratification when the Froude Number rises to a range of from 1 to 2. In the present invention, the value of the Froude Number ranges in the hundreds, which assures complete mixing of any density variations. These high values are assured by the fact that in dense phase flow, the term  $\Delta\gamma/\gamma$  in the equation above is small. --

## MAILING ADDRESS OF SENDER:

Lawrence E. Evans, Esq.  
Blackwell Sanders Peper Martin, LLP  
720 Olive, 24<sup>th</sup> Floor  
St. Louis, MO 63101

PATENT NO.

6,848,502

No. of additional copies

-1-

Burden Hour Statement: This form is estimated to take 1.0 hour to complete. Time will vary depending upon the needs of the individual case. Any comment on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

STLD01-1147524-1

MAR 27 2005

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION****PATENT NO : 6,848,502****DATED : February 1, 2005****INVENTOR : William M. Bishop, et al.**

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**PATENT NO.****6,848,502****No. of additional copies****-1-**

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DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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